UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,334	12/28/2000	Jonathan M. Zweig	003239 .P072	7667

8791 7590 06/16/2005		EXAMINER	
BLAKELY SOKOLOFF TAYLOR & ZAFMAN		ELALLAM, AHMED	
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SEVENTH FLOOR		ART UNIT	PAPER NUMBER
LOS ANGELES, CA 90025-1030		2662	

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/751,334	ZWEIG ET AL.
	Examiner	Art Unit	
	AHMED ELALLAM	2662	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *15 February 2005*.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *17-32 and 40-46* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *17-32 and 40-46* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

This office action is responsive to Amendment filed on February 15, 2005. The

Amendment has been entered.

Claims 17-32, 41-46 are pending, Claims 1-16 and 33-40 were cancelled.

Claim Objections

1.   Claim 45 is objected to under 37 CFR 1.75(c), as being of improper dependent

form for failing to further limit the subject matter of a previous claim. Applicant is

required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper

dependent form, or rewrite the claim(s) in independent form. The recited limitation of the

second control unit is already recited in base claim 44.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of
> making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the
> art to which it pertains, or with which it is most nearly connected, to make and use the same and shall
> set forth the best mode contemplated by the inventor of carrying out his invention.

2.   Claims 17-32, 41-46 are rejected under 35 U.S.C. 112, first paragraph, as failing

to comply with the written description requirement. The claim(s) contains subject matter

which was not described in the specification in such a way as to reasonably convey to

one skilled in the relevant art that the inventor(s), at the time the application was filed,

had possession of the claimed invention:

Regarding claim 17-32, 41-46, while the specification as originally filed describes a message having a first control data and second control data for respectively enabling (at least) a wireless unit to implement RTS/CTS and the adjustment of fragmentation threshold, it doesn't further describe adjusting the fragmentation <u>independent of whether or not RTS/CTS data are used</u> while using the same message.

The specification as originally filed uses fragmentation and/or RTS/CTS, in the wireless units (or access points), the specification describes the use of either fragmentation or RTS/CTS or both, but does not use both fragmentation and RTS/CTS along the feature of the fragmentation <u>independent of whether or not RTS/CTS data are used</u> while using <u>the same message</u>.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3.   Claims 17-32, 41-46 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to independent claim 17, it is not clear what is meant by the claimed "message including (i) a first control data that causes said one or more wireless unit to enable request to send (RTS) and clear to send (RTS/CTS) data transmissions in transmitting data packets to an access point, and (ii) a second control data that causes said one or more wireless units to automatically adjust a fragmentation threshold in response to changes within the wireless transmission medium independent of whether

or not RTS/CTS data are used". More specifically, the fact that the message having

both first control data and second control data is used to enable the RTS/CTS and the

fragmentation is in contradiction with the feature of adjusting the fragmentation

independent of whether or not RTS/CTS data are used.

Negating the use of the RTS/CTS is absurd, since the RTS/CTS are already

used along the fragmentation threshold adjustment.

With regard to claims 21, 25, 29, 41 and 44, claims 21, 25, 29, 41 and 44 suffer

from similar deficiencies as indicated in claim 17.

Claims 18-20, 22-24, 26-28, 30-32, 42-43, and 45-46 depends from respective

claims 17, 21, 25, 29, 41 and 44, thus they are subject to the same rejections.

Examiner, in the following office action and in light of the specification, interprets

the claimed adjusting the fragmentation independent of whether or not RTS/CTS data

are used, to mean that if the fragmentation adjustment message is used along the

RTS/CTS, the use of the fragmentation threshold adjustment is independent from the

use of the RTS/CTS.

Therefore, the feature of the *automatically adjusting the fragmentation threshold*

independent of whether or not RTS/CTS is interpreted as such in the rejection that

follow, which feature is described by Adashi, see figure 10, steps 42, 45, 46 and 47, and

the response to argument.

Claim Rejections - 35 USC § 102

(e) the invention was described in a patent granted on an application for patent by another filed in the
United States before the invention thereof by the applicant for patent, or on an international application

by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4.   Claims 17, 18, 21, 22, 29, 30, and 41-43 (as best understood) are rejected under 35 U.S.C. 102(e) as being anticipated by Adachi, U.S. Patent No (6,256,334).

Regarding claim 17, with reference to figure 3, Adachi discloses a method of wireless communications comprising:

adding RTS/CTS frame to a synchronization frame to be notified to the terminal station 2, see column 15, lines 33-44,

adding a maximum packet length to the synchronization frame. See column 15, lines 33-44, column 23, lines 27-34 and figure 10 steps 48 and 49. (Examiner interpreted the added maximum packet length as being the claimed message including a second control data that causes said one or more wireless units to automatically adjust fragmentation threshold in response to changes in the wireless transmission medium).

Adashi further discloses counting the number of retransmissions (claimed measuring a transmission error factor) due to collisions/contention (claimed changes within the transmission medium) and using that number in adjusting the maximum data

packet length (claimed fragmentation threshold) to be transmitted, see column 15, lines

19-25. (Claimed measuring a transmission error factor and adjusting the fragmentation

threshold in accordance with the measured transmission error).

Adashi discloses that each of the fragmenting and RTS/CTS can be used alone

or in combination, see figure 10, steps 42, 45, 46 and 47. (Examiner interpreted the use

of one of fragmenting, RTS/CTS or both as the claimed automatically adjusting the

fragmentation threshold independent of whether or not RTS/CTS)

Regarding claims 18, 22, 30, and 42, Adashi discloses the use of RTS/CTS

frame is notified to each terminal station 2 by way of the synchronization frame signal.

See column 23, lines 29-34. (Examiner interpreted the notification of each terminal

station by way of the synchronization frame, as being the claimed *message comprises a*

multicast data packet intended for said one or more associated wireless unit, because

only the terminal stations that are within the base station cell that would be able to

receive the synchronization frame, and that reads on the multicasting feature).

Regarding claim 21, with reference to figures 1 and 3, Adashi discloses a radio

base station 1 (claimed access point) having an RTS/CTS-addition-and-packet-length-

setting Section 68 in combination with SYNCH Frame transmission section 51 that

transmit a synchronization message (claimed message) having RTS/CTS frame

(claimed first control data) and maximum packet length (claimed second control data)

to a plurality of terminal stations (figure3, units 2), see column 15, lines 33-44. and

column 23, lines 27-34 and figure 10 steps 48 and 49. Adashi further discloses

dynamically counting the number of retransmissions due to collisions/contention, and

using that number in adjusting the maximum data packet length to be transmitted, see

column 15, lines 19-25. (Examiner interpreted the combination of the units 68 and 51

as being the claimed logic circuit). (Claimed an access point having a logic circuit to

transmit a message to one or more associated wireless unit, the message includes a

first control data that causes one or more associated wireless units to implement

RTC/CTS in transmitting data packets to the access point, and a second control data

that causes one or more wireless unit to automatically adjust a fragmentation threshold

in responses to changes within the wireless transmission medium, the logic continue to

adjust the fragmentation threshold through subsequent messages based on a

measured transmission error factor). (Examiner interpreted the dynamic maximum

packet length adjustment by the RTS/CTS-addition-and-packet-length-setting Section

68, (see column 15, lines 1-44) as being the claimed logic continue to adjust the

fragmentation threshold through subsequent messages based on a measured

transmission error factor and the collision/contention as being the claimed changes to

the wireless transmission medium).

Adashi discloses that each of the fragmenting and RTS/CTS can be used alone

or in combination, see figure 10, steps 42, 45, 46 and 47. (Examiner interpreted the use

of one of fragmenting, RTS/CTS or both as the claimed automatically adjusting the

fragmentation threshold independent of whether or not RTS/CTS)

Regarding claim 29, with reference to figure 2, Adachi discloses a wireless

terminal stations 2, comprising:

a plurality of sections 72-78 to communicate with a radio base station 1 (figure3);

(claimed a wireless transceiver to communicate with an access point via a wireless

transmission medium);

a SYNCH FRAME RECEPTION SECTION 70, (claimed logic circuit) to receive

synchronization message having an RTS/CTS frame synchronization message

(claimed message) having RTS/CTS frame (claimed first control data) and maximum

packet length (claimed second control data that causes automatic adjustment of the

fragmentation threshold). See column 15, lines 33-44. Adashi further discloses

dynamically counting the number of retransmissions due to collisions/contention, and

using that number in adjusting the maximum data packet length to be transmitted, see

column 15, lines 19-25. (Examiner interpreted the combination of the units 68 and 51

as being the claimed logic circuit). (Claimed logic circuit to receive a message from

said access point by way of the wireless transceiver, wherein the message includes a

first control data that causes the wireless unit to use request to send (RTS) and clear to

send (CTS) in transmission of the data to the access point, and second control data

that causes automatic adjustment of a fragmentation threshold supported by the

wireless unit in response to changes in the wireless medium, the logic circuit to

continue to adjust the fragmentation threshold through subsequent messages based

on a measured transmission error factor). (Examiner interpreted the dynamic

maximum packet length adjustment by the RTS/CTS-addition-and-packet-length-

setting Section 68, (see column 15, lines 1-44) as being the claimed logic continue to

adjust the fragmentation threshold through subsequent messages based on a

measured transmission error factor, and the collision/contention as being the claimed

changes to the wireless transmission medium).

Adashi discloses that each of the fragmenting and RTS/CTS can be used alone

or in combination, see figure 10, steps 42, 45, 46 and 47. (Examiner interpreted the use

of one of fragmenting, RTS/CTS or both as the claimed automatically adjusting the

fragmentation threshold independent of whether or not RTS/CTS)

Regarding claim 41, with reference to figures 1 and 3, Adashi discloses a radio

base station 1 (claimed access point) having an RTS/CTS-addition-and-packet-length-

setting Section 68 in combination with SYNCH Frame transmission section 51 that

transmit a synchronization message having RTS/CTS frame (claimed second control

data) and maximum packet length (claimed first control data) that causes automatic

adjustment of the fragmentation threshold), see column 15, lines 33-44, and column 23,

lines 27-34 and figure 10 steps 48 and 49. Adashi further discloses dynamically

counting the number of retransmissions due to collisions/contention, and using that

number in adjusting the maximum data packet length to be transmitted to a plurality of

terminal stations (figure3, units 2), see column 15, lines 19-25. (Examiner interpreted

the combination of the units 68 and 51 as being the claimed logic circuit. In addition

Adashi discloses that the synchronization frame comprises a maximum packet length to

be used in fragmenting data for transmission (Claimed an access point having a logic

circuit to transmit a message to one or more associated wireless unit, the message

includes a first control data that causes one or more associated wireless units to

implement a fragmentation threshold in transmitting data packets to the access point

and a second control data that causes said one or more wireless unit to use request to

send (RTC) and clear to send (CTS) in transmission of data to the access point, the

logic circuit to continue to adjust the fragmentation threshold through subsequent

messages based on a measured error rate).

Adashi discloses that each of the fragmenting and RTS/CTS can be used alone

or in combination, see figure 10, steps 42, 45, 46 and 47. (Examiner interpreted the use

of one of fragmenting, RTS/CTS or both as the claimed automatically adjusting the

fragmentation threshold independent of whether or not RTS/CTS)

Regarding claim 43, Adashi discloses dynamic change of the maximum packet

length by having the maximum packet length set to a smaller length or larger length.

see column 15, lines 19-32. (Claimed message includes a specified fragmentation

threshold to be used by the one ore more associated wireless unit, because it inherent

to Adashi that the smaller (or larger) thresholds are specified since the message contain

the length of the packet as the fragmentation indication to be used).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set
forth in section 102 of this title, if the differences between the subject matter sought to be patented and
the prior art are such that the subject matter as a whole would have been obvious at the time the
invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 25, 26, 44 and 45 (as best understood) are rejected under 35 U.S.C.

103(a) as being unpatentable over Adachi, U.S. Patent No (6,256,334).

Regarding claim 25, 44 and 45, with reference to figures 3 and 4, Adashi

discloses an MPU (Microprocessor Unit) 21 that controls each of the constituent

elements attached to it over the bus 29 and manages the terminal station 2 under

control of the radio base station 1. See column 10, lines 15-19. Adashi further discloses

that the radio base station 1 having an RTS/CTS-addition-and-packet-length-setting

Section 68 in combination with SYNCH Frame transmission section 51 that transmit a

synchronization message having RTS/CTS frame (claimed first control data) and

maximum packet length (claimed second control data) to a plurality of terminal stations

(figure3, units 2), see column 15, lines 33-44, and column 23, lines 27-34 and figure 10

steps 48 and 49. Further Adashi discloses dynamically counting the number of

retransmissions due to collisions/contention, and using that number in adjusting the

maximum data packet length to be transmitted, see column 15, lines 19-25. (Examiner

interpreted the combination of the units 68 and 51 as being the claimed logic circuit and

the dynamic maximum packet length adjustment by the RTS/CTS-addition-and-packet-

length-setting Section 68 (see column 15, lines 1-44) as being the claimed logic

continue to adjust the fragmentation threshold through subsequent messages based on

a measured transmission error factor, and the collision/contention as being the claimed

changes to the wireless transmission medium).

Adashi also discloses that each of the fragmenting and RTS/CTS can be used

alone or in combination, see figure 10, steps 42, 45, 46 and 47. (Examiner interpreted

the use of one of fragmenting, RTS/CTS or both as the claimed automatically adjusting

the fragmentation threshold independent of whether or not RTS/CTS)

Adashi does not explicitly disclose a software routine to control the elements of

the base station. However, it would have been obvious to a person of ordinary skill in

the art, at the time the invention was made to load control software in the MPU of

Adashi so that the Adashi's system would be up-gradable. The advantage would be the

ability to add other features to the system of Adashi as the wireless LAN technology

evolves (i.e. RTS/CTS in combination with QoS).

Regarding claim 26, Adashi discloses the use of RTS/CTS frame is notified to

each terminal station 2 by way of the synchronization frame signal. See column 23,

lines 29-34. (Examiner interpreted the notification of each terminal station by way of the

synchronization frame, as being the claimed *message comprises a multicast data*

packet intended for said one or more associated wireless unit, because only the

terminal stations that are within the base station cell that would be able to receive the

synchronization frame, and that reads on the multicasting feature).

6.   Claims 19, 20, 23, 24, 27, 28, 31, and 46 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Adashi in view of Fisher, US (5,889,772). Hereinafter referred

to as Fisher.

Regarding claims 19, 23, 27, 31, Adashi discloses substantially all the limitations

of respective parent claims 17, 21 25 and 29 as indicated above. In addition Adashi also

discloses dynamic change of the maximum packet length (claimed adjusting

fragmentation threshold), that is determined by the base station wherein the maximum

packet length is set to a smaller length or larger length based on the number of

occurrences of collisions/contention (claimed transmission error factor), see column 15,

lines 19-32. (Claimed second message includes a current fragmentation threshold being

determined by the access point).

The difference between Adashi and the claims is that Adashi does not specify

comparing the "transmission error factor" to an upper threshold and reducing a prior

fragmentation threshold to the current fragmentation threshold if the transmission error

factor is greater than the upper threshold and comparing the transmission error to a

lower threshold and increasing the prior fragmentation threshold to the current

fragmentation threshold if the transmission error factor is less than the lower threshold.

However, Fischer discloses automatically adjusting the fragmentation threshold

comprises

comparing the transmission error factor to an upper threshold, and decreasing

the fragmentation threshold if the transmission error factor is above the upper threshold

(Fischer's embodiment allows the fragmentation threshold to be dynamically adjusted to

maximize the WLAN throughput for the current operating conditions. The fragmentation

threshold is adjusted according to the bit error rate ratios between a transmitting station

and a receiving station. If the BER reaches a certain higher value, the monitor and

adjust unit 112 lower the fragmentation threshold until the packets have a lower rate of

error; for example see column 12 lines 7-20 and 42-55);

comparing the transmission error factor to a lower threshold, and increasing the

fragmentation threshold if the transmission error factor is below the lower threshold if the BER reaches a certain lower value, it is inherent the monitor and adjust unit 112 will raise the fragmentation threshold until the packets have an acceptable rate of error to maximize throughput; see column 3 lines 65-67 and column4 lines 34-38).

it would have been obvious to a person of ordinary skill in the art, at the time the invention was made to use the dynamic fragmentation method of Fisher in lieu of that of Adashi so that the throughput of Adashi system will be increased while maintaining a range of tolerable number of retransmissions. A person of skill in the art would be motivated to do so by recognizing the advantage of having an upper and lower fragmentation limits in shaping the traffic load in the wireless medium of Adashi instead the single comparing step of Adashi. In addition, it would be advantageous to provide the ability to limit the number of error within an acceptable range for data transmission, and similarly enable the system Adashi to provide wireless QoS by assigning different threshold limits to different classes of traffic.

Regarding claims 20, 24, 28, Adashi discloses dynamic change of the maximum packet length by having the maximum packet length set to a smaller length or larger length based on the number of occurrences of collisions/contention (claimed transmission error factor), see column 15, lines 19-32. But does not disclose dividing the maximum packet length (claimed maximum packet by a divisional factor).

However, Fisher discloses adjusting the fragmentation threshold level for providing fragmentation of data frames to be transmitted according to the ratio of the

incremented count of the failures to the incremented count of the attempts (i.e. BER (bit error rate)) (claimed divisional factor), see column 12, lines 6-12, and based on the calculated BER ratio, the fragmentation threshold level is adjusted, see column12, lines 14-18.

It would have been obvious to a person of ordinary skill in the art, at the time the invention was made to use the BER divisional factor of Fisher in adjusting (determining) the fragmentation threshold of Adashi so that instead of fragmenting the packets based on the number of collisions/contention, the BER (Bit Error Rate) would give a more precise tolerance level of errors in the transmission of data. A person of skill in the art would be motivated to do so by recognizing the possibility of not exceeding the level of errors permissible in the implementation of different traffic priorities. It would also be advantageous to provide specific BER thresholds for each wireless unit in accordance with the type of traffic between each wireless unit and the base station.

Regarding claim 46, Adashi discloses dynamic change of the maximum packet length by having the maximum packet length set to a smaller length or larger length. see column 15, lines 19-32. (Claimed message includes a specified fragmentation threshold to be used by the one ore more associated wireless unit, because it inherent to Adashi that the smaller (or larger) thresholds are specified since the message contain the length of the packet as the fragmentation indication to be used).

7.   Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Adashi

in view of Fisher, US (5,889,772) and further in view of Fisher US (6,640,325).

Hereinafter referred to as Fisher'772 and Fisher'325 respectively.

Regarding claim 32, Adashi discloses dynamic change of the maximum packet

length (claimed fragmentation threshold) by having the maximum packet length set to a

smaller length or larger length in the synchronization frame (claimed second control

data) based on the collision/contentions, (the smaller length is provided within the

synchronization frame (claimed synchronization frame provided in real-time)). See

column 15, lines 19-32. Adashi does not explicitly disclose the smaller fragmentation

threshold is provided in response to a change in the wireless transmission medium due

to interference.

However, Fisher'772 discloses adjusting a fragmentation threshold based on

BER (Bit error rate), see column12, lines 6-18.

Fisher'325 discloses that all the networks are subject to interference that is a

source of bit errors. See column 1, lines 19-37.

It would have been obvious to adjust the maximum packet length to the smaller

value of Adashi, using the bit error rate calculation of fisher'772 by recognizing the

level of errors versus the interference level as indicated by Fisher'325 so that the

fragmenting of the packets in the system of Adashi would be in accordance with the

level of interferences from various sources. The advantage would be the ability to

transmit data within a tolerable error levels in the presence of variable interference

conditions.

Response to Arguments

8.   Applicant's arguments filed on 5/24/2005 have been fully considered but they are

not persuasive:

Applicants argue that Adashi doesn't describe or suggest a method or logic as

recited in claims 17, 21, 25, 29, 41 and 44. Applicants relied on figure 10, step 42, 51-

52, step 45, 46 and 47-49. Examiner respectfully disagrees, because of the following

main reasons: firstly, Applicant misinterpreted the teaching of Adashi; secondly the

core feature of Applicants argument is neither clear nor supported by the specification

as originally filed. (See 112 rejections above). Applicant contend that the claimed

adjusting the fragmentation independent of whether or not RTS/CTS data are used

introduced by the amendment is not disclosed by Adashi. Examiner interpreted this

feature based on the disclosure, in which a message defined as an IAPP multicast

packet (spec pages 16, line 24 through page 17, line 24), the message having (inter

alias) a first control signal (for fragmentation use) and a second control signal (for

RTS/CTS); in addition, the specification briefly mention the concept of performing

fragmentation and/or RTS/CTS (page 16, lines 7-15), However Adashi describe with

greater details the use of fragmenting and /or RTS/CTS, the details of Adashi of

fragmentation and /or RTS/CTS are not limiting in the sense that they are dependent of

each other as Applicants contend.

Examiner assumes that Applicant amendment to independent claims 17, 21, 25,

29, 41 and 44 is intended to overcome the Adashi reference and not better claim the

invention. Moreover, the teaching of Adashi with regard to the independence of the

RTS/CTS from the adjustment of fragmentation is clearly shown in figure 10, see for

example step 42-46, in which the RTS/CTS is used without fragmenting, and step 47-

48-50 in which fragmentation is used without RTS/CTS, and the use of both RTS/CTS

fragmentation step 51.

Examiner concludes, given the most reasonable broadest interpretation of the

claim limitations, that the rejection above is proper.

Conclusion

9.   Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37
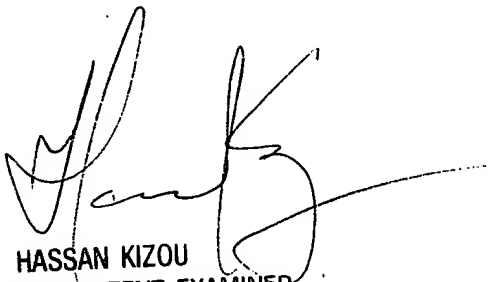
CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to AHMED ELALLAM whose telephone number is (571)

272-3097. The examiner can normally be reached on 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kizou Hassan can be reached on (571) 272-3088. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

AHMED ELALLAM
Examiner
Art Unit 2662
June 10, 2005

HASSAN KIZOU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600